

Title (en)

SYSTEM FOR BATTERY PACK THERMAL MANAGEMENT

Title (de)

SYSTEM ZUR THERMISCHEN VERWALTUNG EINES BATTERIEPACKS

Title (fr)

SYSTÈME DE GESTION THERMIQUE DE BLOC-BATTERIE

Publication

EP 4184657 B1 20240605 (EN)

Application

EP 21209533 A 20211122

Priority

EP 21209533 A 20211122

Abstract (en)

[origin: EP4184657A1] A system for battery pack thermal management, wherein the battery pack comprising a cell stack comprising battery cells arranged in the cell stack, wherein the system comprising a cooling element arranged on a top face of the battery cells and comprising a first heat exchange surface and second heat exchange surface, wherein the cooling element comprising at least one extension arranged on the first exchange surface; the first heat exchange surface is configured to be in thermal contact with battery cell busbars and heat producing hotspot areas of a battery cell casing, the second heat exchange surface is configured to be in thermal contact with electrical circuit components of the battery pack, and thermal energy is configured to be conducted from the battery cell busbars, heat producing hotspot areas, and electrical circuit components to the cooling element. Also a battery pack and a method are disclosed.

IPC 8 full level

H01M 10/613 (2014.01)

CPC (source: EP US)

H01M 10/613 (2015.04 - EP US); **H01M 10/6556** (2015.04 - US); **H01M 50/24** (2021.01 - US); **H01M 50/284** (2021.01 - US);
H01M 50/505 (2021.01 - US); **H01M 50/519** (2021.01 - US); **H01M 50/583** (2021.01 - US); **H01M 2220/20** (2013.01 - US);
Y02E 60/10 (2013.01 - EP)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 4184657 A1 20230524; EP 4184657 B1 20240605; CN 116154349 A 20230523; US 2023163377 A1 20230525

DOCDB simple family (application)

EP 21209533 A 20211122; CN 202211464255 A 20221122; US 202218057698 A 20221121